WPS5187

Policy Research Working Paper 5187

Bosnia and Herzegovina's Surprising Export Performance

Back to the Past in a New Veil but Will It Last?

Bartlomiej Kaminski
Francis Ng

The World Bank
Development Research Group
Trade and Integration Team
January 2010

Policy Research Working Paper 5187

Abstract

Bosnia and Herzegovina's industrial restructuring, as seen through the lenses of foreign trade performance and its sustainability, has taken off. Bosnia and Herzegovina's exports have displayed strong dynamics outstripping the pace of growth of exports in almost each year over 1997–2007 combined with the shift to higher value added exportables. Although its performance during the period 1996-2000 following the end of war in late 1995 was not surprising, given relatively low foreign direct investment inflows and weaknesses in the investment climate, its subsequent export performance has come as a surprise. Industrial restructuring, as revealed in the pattern of exports, consisted in rebuilding and modernizing the pre-independence industrial base built around wood products, metalworking, clothing, and automotive products. Although exports still remain relatively low in terms of both per capita and gross domestic product in comparison with other Balkan economies, there has been significant change in their composition, indicating a growing presence of more processed manufactures and the participation of local firms in global networks of production and distribution, mostly as independent suppliers. Firms with foreign participation have been one of the levers of export upgrading and expansion. The dominance of joint ventures as a mode of entry of foreign capital is worrisome for two reasons: first, domestic firms may not have access to the most recent technologies and knowhow; and second, it is always indicative of weaknesses of a domestic economic regime. This also raises concerns about the future sustainability of export performance.

This paper—a product of the Trade and Integration Team, Development Research Group—is part of a larger effort in the department to analyze regional integration and trade policy. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at fng@worldbank.org.

Bosnia and Herzegovina's Surprising Export Performance: Back to the Past in a New Veil but Will It Last? •/

By

Bartlomiej Kaminski
University of Maryland, College Park, US, and University of Information Technology and Management, Rzeszow, Poland

and

Francis Ng
Development Research Group – International Trade and Integration, World Bank, Washington, D.C.

Key words: integration, foreign trade, network trade, parts and components, factor intensity, foreign direct investment, industrial restructuring, revealed comparative advantage, export specialization

JEL classification: F10, F13, F14, F15, L16

•/ A revised and abridged version of a background report "Governance and Foreign Trade Performance of Bosnia and Herzegovina: The Challenge of Sustaining Impressive External Performance," prepared for *Bosnia and Herzegovina: Country Economic Memorandum*. The authors are grateful to Orhan Niksic for useful comments and suggestions on the draft of the above report.
* E-mails of correspondence: "Bart Kaminski"<bkaminski71@gmail.com>; "Francis Ng"<fng@worldbank.org>

Introduction

The past decade following the end of the war has witnessed significant changes in the composition of Bosnia and Herzegovina's (BiH's) foreign trade indicative of ongoing reconstruction and modernization of BiH's industrial base. The relative position of natural resource- and unskilled labor-intensive products has declined indicating shifts in a causal chain linking factor endowments, comparative advantage and trade patterns. The most striking feature of industrial restructuring is the close of the gap between highly skilled labor force in such sectors as metalworking and mechanical and automotive engineering and a country's export basket characteristic of the period immediately following the end of war by dominance of natural resource- and unskilled labor-intensive exports. Inflows of FDI combined with the return of BiH refugees, some of them with business skills acquired during the forced emigration have put BiH on a new path, although—in terms of emerging patterns of specialization—on the one that BiH had earlier negotiation, albeit in a completely different external and internal circumstances.

BiH has experienced strong export growth over the last decade, although from very low levels depressed by the war. While imports have grown rather steadily since the Dayton Agreement put an end to the war in late 1995, exports have gone through three different phases: strong recovery in 1996-99, stagnation in 2000-02, and robust resumption of growth in 2003-07. During the last phase, BiH exports growth has resulted in an almost two-fold increase in BiH share in world exports: the value of exports increased 85 percent in 2004-06 followed by Serbia (66 percent), and its share in world exports grew from 0.017 percent in 2000 to 0.027 percent in 2006, which was by far the largest increase among SEE countries. But in 2007, its share in world exports grew only 3.7 percent (only Croatia's share increased 0.1 percentage point less, i.e., 3.6 percent) while that of the other SEE economies increased more than 20 percent thus raising concerns whether the expansion will be sustained.

Dynamism in export growth has been accompanied by shifts in its composition increasingly in line with the pre-war industrial structure of the BiH economy. Although ranked next to Macedonia as the poorest republic in former Yugoslavia, BiH had a well-developed industrial base built around its endowments in natural resources (forests, hydropower, coal, iron, ore, copper, manganese, bauxite), the political decision to locate many of former Yugoslavia's defense plants there, as well as its specialization in agricultural equipment and automotive parts. Much of its industrial base has not survived the war. But both human capital—thanks to the return of many refugees with business skills acquired abroad—and the natural resource base remained intact. It appears that reconstruction, mainly driven by FDI, has contributed to the most recent export growth phase. In contrast to the first phase in

1996-99, when natural-resource intensive and unskilled labor intensive products were the main levers of export expansion, capital and skilled labor intensive products drove the export expansion in 2003-07.

The shift in factor content of exports towards capital and skilled labor intensive products has significant implications for future competitiveness of the BiH economy. Since labor costs in BiH are relatively high, unskilled labor-intensive exports, such as textiles and footwear, face the growing competition from low-wage countries not only in Asia but also from other Balkan economies. While some of them are likely to withstand this competition thanks to geographical proximity allowing shifting to higher value added apparel, as already demonstrated by some BiH firms, the contribution of these sectors to export earnings is likely to continue falling. Furthermore, in contrast to exports of low processed resource-based products, industries using intensively skilled labor and capital tend to pay higher wages. In consequence, exports of these sectors boost output growth and help improve living standards and reduce poverty.

Since mirror statistics provide a more adequate picture of BiH export performance than BiH statistics, we use the former. The problem with the BiH foreign trade statistics assessed against other national statistics is that, contrary to widespread practice of under-reporting imports in developing countries, they under-report exports while accurately reporting imports. BiH exports statistics have consistently underestimated the extent to which its exports basket has evolved over the last several years.

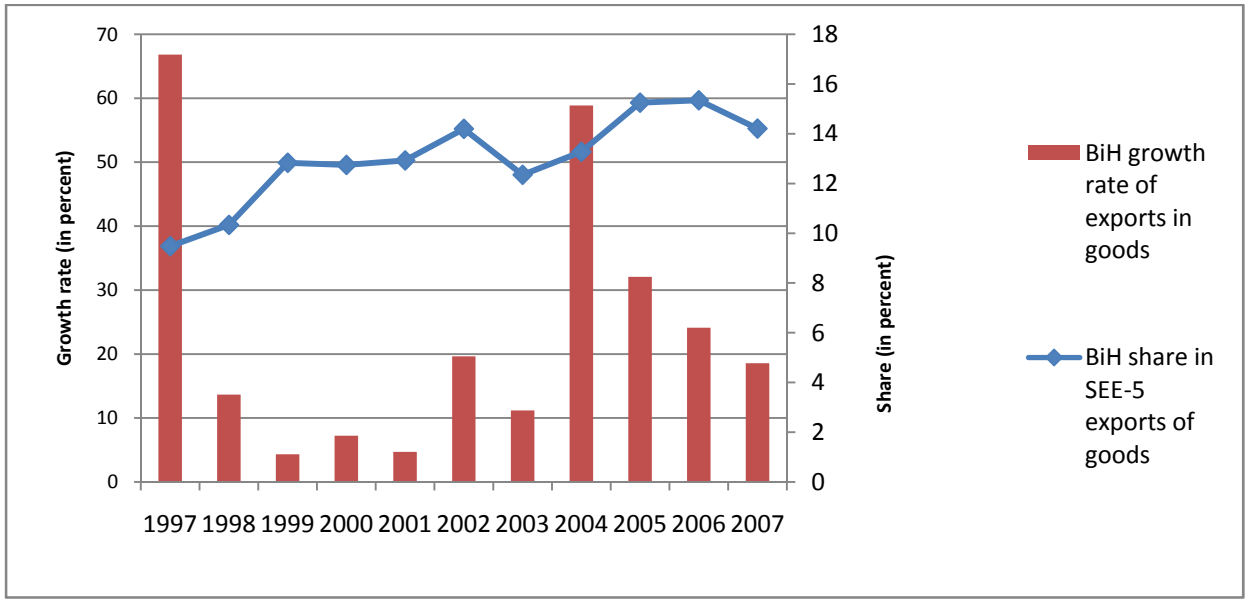
The paper is structured as follows: Section 1 examines dynamics of BiH export performance since the end of war in 1995 distinguishing three phases: post-war recovery; stagnation; and current expansion. Levers of export growth performance during the recent expansion phase are addressed in Section 2. Section 3 discusses change in factor intensities of BiH export performance against other SEE economies and the role of FDI in BiH exports. Section 4 concludes.

1. Export performance: Recovery, slowdown, and expansion

Continued expansion of imports and occasionally explosive exports has characterized BiH foreign trade performance since the 1995 Dayton Peace agreement. Despite volatility, one may distinguish three phases in dynamics of BiH exports based on below or above single-digit growth rates: post-war recovery of exports in 1996-1998; slowdown in 1999-01; and the current phase of export expansion since 2002-03. Double-digit growth rates in the values of exports have characterized both expansionary phases, whereas during the slowdown phase growth rates of exports in terms of value fell into a single-digit territory. However, despite the slowdown in export growth, the share of BiH export in

world exports increased indicating better than average performance.[1] In all, exports displayed huge volatility during the post-war recovery, stability during slow down and steady growth during the current expansionary phase, although at falling—but still double-digit—growth rates: both phases had one-year surges in exports growth of 67 percent in 1997 and 58 percent in 2004. Viewed in the regional perspective of other SEE-5 exports performance, the share of BiH in total regional exports increased in 1997-99, was stable in 1999-2001, increased in 2002, contracted in 2003, and rebounded in2004-06, only to fall slightly in 2007 (Figure 1).

Figure 1: BiH export growth performance in regional perspective: annual growth rates and share in SEE-5 exports in 1997-2006 (in percent)



Note: No regional total exports are available, because as of July 2007, not all SEE-5 countries reported their trade data to the UN COMTRADE database.
Sources: own calculations from data reported to the UN COMTRADE database.

While high double-digit growth rates during the post-war recovery do not come as surprise, the current expansion points to the progress achieved in industrial restructuring. The current phase has been particularly impressive in the pace of exports growth. BiH has displayed a very strong export performance during the current expansion phase relative to other SEE-economies. Its share in aggregate SEE-6 exports of goods rose from 2 percent in 1997 to 12 percent during the last year of post-war recovery in 2000. It fell to 10 percent by the end of the stagnation phase in 2002. Despite the value of

[1] Its share increased from 0.014 percent in 2000 to 0.015 percent in 2001, and 0.017 percent in 2002 (derived from the UN COMTRADE database).

BiH exports growing annually at 33-34 percent in 2003-05, its share only slightly increased to 11 percent in 2003-04 and 12 percent in 2005, mainly because of the re-entry of the "post-Kosovo and post-Milosevic" Serbia and Montenegro (S&M) into world markets following the 45 percent contraction of total exports in 1999.[2] The conditions surrounding S&M exports growth are strongly reminiscent of the post-war phase of the BiH export dynamics. The value of S&M exports reached the pre-Kosovo war level in 1998 only in 2003. The share of S&M in total SEE exports grew from 22 percent in 2001 to 30 percent in 2006. Over the same time period, the share of BiH increased from 11 percent to 15 percent. In 2007, it fell, however, to 14.2 percent.

While the choice of the base year or the use of measures in terms of value may yield slightly different results, the average LSG growth rate in the share of a country's exports in world imports over 2003-07 provides a much more accurate measure of export performance. It is not affected by the change in relative prices of exported products and is less sensitive to the choice of a base year: we set it in 2003 as this is the beginning of the expansion phase in BiH exports. Furthermore, the use of mirror statistics puts to rest concerns about the quality of foreign trade reporting by SEE-6: since most of SEE-6 exports go to highly developed countries with the best reporting system in the world, they are as reliable as they can get. As can be seen from data presented in Table 1, each SEE has succeeded in increasing its market share in total world markets. Except for Croatia, their average LSG rates were in double digits, with BiH slightly below growth rates achieved by Macedonia and S&M (Serbia and Montenegro).

Table 1: Dynamics of exports in terms of value of exports and evolving shares in world markets in 2003-2007 (in percent)

	LS Growth Rate 2003-07 (%)		Export Share in World Markets (%)				
SEE-5	Export Value	Wld Mkt Share	2001	2003	2005	2006	2007
Albania	18.9	4.2	0.0058	0.0064	0.0062	0.0063	0.0078
BiH	27.5	12.8	0.0152	0.0166	0.0254	0.0272	0.0282
Croatia	17.3	2.6	0.0543	0.0649	0.0715	0.0723	0.0749
Macedonia, FYR	27.7	13.1	0.0167	0.0144	0.0185	0.0198	0.0259
Serbia and Montenegro	26.7	12.1	0.0254	0.0324	0.0451	0.0476	0.0572

Source: Based on world import data from the UN COMTRADE Statistics.

Despite impressive growth in the 2000s, BiH as well as SEE region's exports remain very low: on a per capita, they amounted to US$857 in 2007 as compared to US$ 5,620 for the EU-8. The value of

[2] Annual rates of growth of Serbia and Montenegro exports in terms of value were 25 percent and 47 percent in 2003 and 2004 respectively (derived from the UN COMTRADE database).

Macedonia exports per capita of US$1,495 was 83 percent above BiHs (US$818) and that of Croatia 199 percent. Albania's exports per capita stood at 39 percent of BiH exports

While no reliable foreign trade data are available for the 1990s, the shift in the direction of BiH exports towards its two preferential partners—the EU and CEFTA 2006—has been beyond doubt. These two trading blocs take now around 90 percent of BiH total exports. Yet, the share of the EU, including its new member states from Central Europe, which grew from 53 percent in 2003 to 57 percent (Table 2), remains somewhat below the levels experienced by other European transition economies throughout the 1990s ranging between 60-65 percent.[3]

Table 2: Dynamics and direction of BiH exports in 2003-07: share of major partners and LSG rates of exports growth (in percent)

	2003	2007	Index 2007, 2003=100	LSG rate 2003-07
EU-27	53.4	57.3	107	37.8
SEE-6	30.3	33.2	110	35.9
ROW	16.3	9.6	59	23.7
TOTAL	100.0	100.0	100	35.5

Source: UN COMTRADE database.

BiH export performance does not come across as very impressive when cast against that of Central European EU-8 members. The reference to EU-8 as comparators seems to be justified for three intertwined reasons: these countries were on average roughly at a similar level of economic development when the transition to market-economies began in the early 1990s; and the SAA, not unlike the European Association Agreements for EU-8, has started the EU accession process with huge implications for foreign trade policy and FDI inflows. The latter reveals itself in its impact on export performance operating through opening to competition from imports and. The caveat is twofold: in contrast to the EU-8, BiH went through devastating war, and in contrast to BiH, EU-8 adopted a radical approach to economic reforms.

The differences in domestic circumstances of transition of EU-8 and BiH are nakedly visible in their export performance. Except for the post-war recovery of exports phase, the EU-8 outperformed BiH and other SEE-economies in terms of volumes of exports of goods and services in other two phases with the difference in growth in their favor of 1.4 percentage points and 0.8 percentage points of average LS growth rates, respectively. Hence, the gap between the EU-8 and SEE including BiH has

[3] This share refers to trade with the EU-15, not EU-27. Hence, the discrepancy is even larger than implied by these numbers.

continued to increase. In terms of goods exports in current prices, the situation was slightly different: BiH recorded stronger export growth not only during the post-war phase but also during the current expansionary phase. The differences in LSG rates in favor of BiH were quite significant: 18.2 percentage points and 7.4 percentage points, respectively (see Table 3).

Table 3: BiH export performance in goods and non-factor services in constant prices and in goods in current prices in comparative perspective in 1996-2007

Country	LS Growth Rate (%)			Change 2007 over 2006 (%)
	1996-2000	2000-2003	2003-2007	
Exports of goods & non-factor services in constant 2000 prices				
Bosnia and Herzegovina	16.0	5.8	11.7	12.5
SEE-4 (excl. BiH)	na	5.5	7.0	8.4
Memo: EU-8	10.6	6.6	12.5	12.2
Exports of goods in current prices				
Bosnia and Herzegovina	25.8	6.5	28.9	25.4
SEE-4 (excl. BiH)	na	na	27.6	27.2
Memo: EU-8	7.6	16.2	21.5	27.8

Note: EU-8 includes Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia: SEE-4 includes Albania, Croatia, Macedonia and S&M.
Sources: World Bank WDI database for goods and non-factor services and UN COMTRADE Statistics for goods.

BiH has also recorded better performance than the average for other SEE-4 economies across all three phases. It had a larger edge in the increase of exports in terms of volume than in value indicating that other SEE-economies faced more favorable change in their terms of trade.

Relatively impressive record of the BiH export performance raises several questions addressed in the following sections: Has the expansion consisted simply of exporting more of the same goods? What do the changes in import demand tell us about the pace of industrial restructuring? What do the changes in exports depending on the degree of processing embodied in exported products tell us about BiH's industrial capacities? What characteristics do new star performers embody in terms of technology and the degree of processing?

2. Drivers of export expansion: Endowments in factors of production and changes in competitiveness

Levers underlying the current phase of export expansion are complex ranging from more of the same to those heralding a significant change in competitiveness in the future. On the one hand, traditional sectors continue to generate most of BiH foreign currency earnings and account for the bulk of BiH exports. They have been growing and have demonstrated their competitiveness in world markets.

On the other hand, BiH export basket has been changing: the earlier gap between its endowments in factors of production and factor intensities of exports appears to have considerably narrowed. There are also signs that BiH firms, emulating similar experience of Central European transition economies that are now EU members, enter more sophisticated forms of global division of labor based on production fragmentation.

BiH foreign trade performance viewed through the lenses of the change in double–digit SITC sectors' exports and imports between 2003 and 2007 suggests that the export push has been broadly based and in line with BiH endowment in factors of production. Although BiH was one of the poorest republics of the old Yugoslav federation, despite endowments in such natural resources as iron ore, water, forests, lead, and zinc, it had a relatively well developed production capacities in such sectors as defense industries (mainly production and assembly of tanks and aircrafts), automotive (vehicle assembly and production of parts), steel, textiles, tobacco products, wooden furniture, domestic appliances, and oil refining. Metalworking and mechanical and automotive engineering were among main manufacturing specializations of BiH in the FSR of Yugoslavia. Some of these industries were devastated by war and post-war economic mismanagement including delays in privatization. Furthermore, there were losses in human capital: some highly skilled workers emigrated and never returned; some were killed; but many returned and, it appears, have found employment in rebuilt and restructured industries. Changes in foreign trade indicate that BiH is on the way to rebuild its pre-war specialization patterns, albeit in a new form. The hysteresis effect has been occurring as many of these capacities have been either reconstructed or created *de novo* and turned into internationally competitive industrial sectors.

Indeed, the relative position of natural resource-intensive products has declined indicating the shift in a causal chain linking factor endowments, comparative advantage and trade patterns towards capital- and skilled labor-intensive product. This outcome is rather unexpected considering weaknesses in BiH economic institutions and policies, which usually prevent a match between factor intensities revealed in export baskets and country's endowments.

A. Major net exporters: traditional sectors albeit with a twist

While the export coverage of goods in terms of their imports remains relatively low, the improved export performance of 'traditional' sectors made a huge contribution to financial sustainability of external performance, discussed earlier in Section 4. What sectors are major net foreign currency earners? While in 2003 seven double–digit SITC sectors, out of the total of 98 product groups, were net exporters, i.e., the value of their exports was higher than of their imports, their number grew

to 11 in 2007 (see Table 4). Net exporters accounted for 50 percent of BiH total exports in 2003: four years later their aggregate share in total exports increased to 53 percent, as total net exports increased more than three-folds from US$ 306 million to US$ 949 million with the export coverage of total goods imports increasing from 31 percent to 43 percent. Their contribution measured in terms of their combined share in the difference between the value of exports in 2007 and 2003 amounted to 51 percent.

Table 4: Two-digit SITC sectors with the largest contribution to improvement in foreign trade performance between 2003 and 2007 (in percent and millions of US dollars)

	Product Name	LSG rate 2003-07	Share in exports 2003	Share in exports 2007	Index 2007 2003=100	Export in 2007 minus in 2003	Share in total difference	Net exports 2003	Net exports 2007
24	Cork and wood	22	10.7%	7.0%	65	179	5.7%	105.0	267.0
68	Non-ferrous metals	25	16.3%	10.0%	61	248	7.9%	124.0	213.0
82	Furniture/furnishings	35	8.5%	7.1%	83	206	6.6%	29.0	162.0
85	Footwear	**43**	5.3%	5.8%	110	188	6.0%	9.0	94.0
28	Metal ores and metal scrap	**58**	2.3%	6.8%	299	257	8.2%	-20.0	79.0
71	Power generating equipment	34	6.5%	5.9%	92	180	5.8%	-6.0	65.0
35	Electric current	31	4.6%	3.8%	83	111	3.5%	47.0	25.0
27	Crude fertilizer/mineral	**38**	0.8%	0.8%	108	26	0.8%	0.0	16.0
32	Coal/coke/briquettes	**55**	1.3%	3.6%	280	135	4.3%	5.0	12.0
21	Hide/skin/fur, raw	13	2.6%	1.0%	40	17	0.5%	22.2	9.2
52	Inorganic chemicals	**89**	0.1%	1.4%	1048	56	1.8%	-9.4	7.2

Note: the value of net exports equals the difference between the value of a sector's exports and its imports.
Source: Based on UN COMTRADE Statistics.

Sectors that joined the rank of net exporters point to the increase in diversification of BiH export offer as well as to a significant progress in industrial restructuring. The "newcomers" range from exporters of raw materials (metal ores and metal scrap) to process production (inorganic chemicals), and capital and skilled labor-intensive engineering products (power generating equipment).[4]

Two sectors that have significantly reduced their foreign trade balance and may be on the path to become net exporters have been metal manufactured goods (SITC 69) and apparel (SITC 84). The former increased its share in total exports from 4 percent in 2003 to 8 percent in 2007, while the difference between exports and imports of these products fell from US$ 84 million to US$ 10 million over this period. The corresponding data for apparel are as follows: the share contracted from 6 percent

[4] In the context of the emergence of metals ores and scrap as a net exporter, note the contraction in net exports of other raw materials, skins and furs. The value of its net exports fell from US$ 22 million in 2003 to US$ 9 million in 2007. Both appear to be healthy developments reflecting relative scarcities and changing profiles of further processing.

to 4 percent, and the 'trade balance' from US$ 29 million to US$ 12 million. Considering competition in world markets for apparel and clothing from China and other low-cost exporters, performance of BiH producers strikes one as impressive demonstrating their capacity to find niches at higher end of the market (e.g., Borac's contract to supply Hugo Boss) and compete successfully in domestic markets.

While all net-exporting sectors posted strong growth over 2003-07, there has been some realignment in their relative positions in favor of net exporters of non-renewable natural resource-intensive products, albeit with some exceptions. The largest increase in the value of exports in 2007 over 2003 was for metal ores (US$ 257 million accounting for 8.2 percent of the difference in the value of total exports in 2007 and 2003) and non-ferrous metals (US$ 248 million or 7.9 percent). These sectors benefitted from the increase in world prices for many raw materials in this period.

Exceptions to the general pattern of specialization in natural resource-based products included power generating equipment, which emerged as a net exporter already in 2005, although its share in total exports slightly contracted to 5.9 percent in 2007 from 6.5 percent in 2003, and footwear, whose net exports (exports minus imports) increased tenfold over this period from US$ 9 million to US$ 90 million. Major export market for these two product groups is the EU taking more than 96 percent of their exports.

BiH has been successful in reviving its traditional patterns of specialization in line with its endowments in natural resources and production factors. In terms of two-digit SITC sectors, the largest push to positive net exports came from natural resource-intensive products. But not only, as the emergence of footwear industry and power generating equipment producers as net exporters in 2007 clearly testifies to regaining competitive advantage that seemed to be lost to the war devastation. The increase in the value of net exports of these sectors from US$306 million in 2003 to US$949 million in 2007 testifies to their successful restructuring and modernization.

B. Wood cluster and foreign trade

Given BiH endowments in the forest resource base, with forest lands covering around 42-47 percent of BiH (USA AID 2006), it comes as no surprise that the forest and wood sector together with industries using it as a major raw material is a major next exporter. With around half of its territory covered by forests, BiH may be justifiably considered woodland. Many industries have developed using wood as primary or secondary input. It is estimated that around 130 thousand people work directly in wood harvesting and processing (USAID 2006). Products of this sector range from logs to their various

forms of processing and wood-based products. The purpose of this note is to assess contribution of wood and wood-related products to BiH foreign trade performance.

The approach taken to address the role of the wood cluster in BiH foreign trade uses common sense, insights gleaned from various sector studies as well as information on Harmonized System code used by exporters of wood and wood-based products. We identify the following stages in terms of the degree of processing taking place in wood value-chain: logging; primary wood processing (wood harvesting including sawlogs and fuelwood); secondary wood processing (joinery, wood boxes, pallets, furniture) [5]; and other wood based products (paper, cartons, etc.). Annex Table 1 identifies products in terms of six-digit HS (Harmonized System) items, which allows reproducing their foreign trade flows in terms of the level of processing (Table 5).

Table 5: Developments in wood cluster trade (forest 'gate' and wood-based products) in 2003-07 (in million of US dollars and percent)

	2003	2004	2005	2006	2007
	Exports in millions of US dollars				
Logs	6.1	12.1	19.2	34.0	40.8
Primary wood processing	8.8	12.6	11.0	12.9	13.8
Secondary wood processing	197.5	276.5	325.9	485.6	579.6
Other wood based products	11.1	34.4	43.7	56.4	71.0
Total above	223.7	336.0	400.2	589.3	705.8
Share in total exports	21.8	20.8	16.8	17.2	17.0
	Composition of exports (in percent)				
Logs	2.7	3.6	4.8	5.8	5.8
Primary wood processing	3.9	3.8	2.8	2.2	2.0
Secondary wood processing	88.3	82.3	81.4	82.4	82.1
Other wood based products	5.0	10.2	10.9	9.6	10.1
Total above	100	100	100	100	100
	Exports in percent of imports				
Logs	8,993	5,993	12,096	22,362	27,830
Primary wood processing	772	585	167	471	219
Secondary wood processing	251	299	264	378	310
Other wood based products	15	35	33	39	39
Total above	141	169	145	203	180
Total imports of forest 'gate' and wood based products	159	199	276	291	391
Memorandum: difference between exports and imports in millions of US dollars	65	137	124	299	314
Memorandum: share in total exports	22%	21%	17%	17%	17%

Source: Based on BiH's data from UN COMTRADE Statistics.

[5] Their aggregate output was valued at around "… 132 million KM in 2003 and the BiH Foreign Trade Chamber claimed that wood and furniture industry products accounted for 21 percent of the country's export earnings this year." (USAID 2006, p. 4).

An examination of data on trade of the wood cluster leads to the following observations: First, total exports of forest 'gate' and wood based products significantly increased over 2003-07, although at the rates lagging behind the growth of total exports. The value of wood cluster exports more than tripled: their total exports amounted to US$ 706 million in 2007 contributing 17 percent to the total down from 22 percent in 2003 (Table 5).

Second, there are indications of the increase in the level of processing embodied in exports, although products of secondary wood processing continue towering over other wood-related exports with their share in total slowly decreasing from 88 percent in 2003 to 82 percent in 2007. Note however that although the export coverage of imports increased in logs, it fell in other stages of processing except for most processed other wood products. It might be tempting to argue that BiH 'wood-cluster' export basket should be more oriented towards higher stages of processing. Profitability and value-added generated by activity should be the major determinant of allocation of activities to various stages. Viewed in a regional perspective, the composition is neither better nor worse. Secondary wood processed products together with other wood based products accounted in BiH exports (92 percent) roughly for a similar share (91 percent) as in combined exports of Serbia and Montenegro.

Third, the wood cluster has remained one of the major export earners displaying very strong growth in net exports during the current phase. The value of net exports (difference between the value of exports of wood and wood-based products) increased between 2003 and 2007 almost five-fold from US$65 million to US$314 million. The average LSG rate of exports forest 'gate' and wood based products in 2003-07 was 29 percent as compared to 22 percent for their imports.

Recent developments in foreign trade in furniture made of wood, representing a secondary wood processing stage, provide an interesting illustration of broader developments in the wood cluster. In 2006, this subsector recorded its first surplus of US$8 million since 1995. Although imports increased 38 percent in 2007, the increase in the value of exports of 36 percent was sufficiently large to increase next exports to US$10 million (Table 6).

Table 6: Exports and imports of furniture made of wood in 2001-06 (in million of US dollars)

		Trade Value ($ million)						
SITC-R3	Product	2001	2002	2003	2004	2005	2006	2007
8215	Exports of wood furniture	14	17	16	31	34	47	64
8215	Imports of wood furniture	33	37	37	43	41	39	54
	Difference: exports-imports	-19	-20	-21	-12	-7	8	10

Source: Based on partners' data from UN COMTRADE Statistics.

Developments in foreign trade of the wood cluster point to the success of businesses taking advantage of BiH ample endowment in forests. The challenge for the authorities is to ensure rational management of this important resource.

C. Level of processing embodied in exports

In fact, a cursory examination of imports from BiH, as reported by BiH's trading partners, points to growing specialization in more processed goods. According to partners' statistics, the share of BiH in total world imports of the following product groups increased: machinery excluding automobiles; automobiles and parts; and consumer goods. The increase was particularly impressive in sectors producing machinery (Table 7).

Table 7: World imports from BiH in terms of end-use products in 2003-07 (in percent)

End-use Product	Composition of imports in 2007	Share in world imports in 2007	Change in share in world imports in 2007 over 2003
Agriculture, Food & Feeds	13.8	0.048	123
Industrial Raw Materials	16.8	0.100	139
Fuels	6.0	0.012	192
Iron and Steel	7.3	0.060	142
Machinery excluding automobiles	14.3	0.015	529
Automobiles & Parts	1.4	0.005	360
Other Consumer Goods	40.5	0.034	341
All Goods	100.0	0.028	197

Note: Agricultural Food & Feeds (SITC 0+1+2+4-27-28); Industrial Raw Materials (SITC 27+28+68); Fuels (SITC 3); Iron and steel (SITC 67); Machinery excluding automobiles (SITC 7-78); Automobiles & Parts (SITC 78); Other Consumer Goods (SITC 5+6+8+9-67-68); All Goods (0 to 9).
Source: Derived from data reported by BiH trading partners to the UN COMTRADE database.

Not surprisingly considering that the EU-27 is a major export market for BiH, a more detailed examination of EU statistics corroborates observations derived from world statistics of imports from BiH rather than those implied by BiH statistics. If anything, they indicate rather a significant progress in BiH industrial restructuring as captured by changes in competitiveness of various product groups. EU mirror statistics also point to plugging-in of BiH suppliers into global automotive networks discussed in more detail in Section 6.

The shift away from low-processed goods can be easily inferred from gleaning data tabulated in Table 8. The aggregate share of traditional imports (foods, raw materials, and fuels) fell from 38 percent in 2003 to 29.5 percent in 2007. Except for agricultural foods and feeds, other categories from this group have experienced the loss in market share in the EU since 2005. Simultaneously, the aggregate share of machinery and automotive parts, i.e., highly processed manufactured goods increased from 11.7

percent to 21.3 percent in this period. The latter have also displayed the increase in terms of value only second to iron and steel: the average LSG rate was 42 percent for automotive goods and 38 percent for machinery excluding automobiles as compared with 23 percent for total exports.

There is also a strong indication that producers of clothing and footwear has been able to find higher value added niche in this extremely competitive market in spite of high wages in BiH. The share of other consumer goods, dominated in past by textile and clothing and footwear, fell steadily from 47 percent in 2003 to 39 percent in 2006, despite the fact that BiH exporters of these products outperformed other suppliers and increased their presence in EU markets. It sharply increased in 2007 to 44 percent of total EU-oriented exports. The share of other consumer goods in EU imports increased 17 percent in 2007 over 2006. The Borac's—the largest clothing producer in BiH—contract to supply Hugo Boss at higher end clothing has probably contributed to this outcome.

Table 8: EU imports from BiH in terms of end-use products: their composition, share in EU imports, and dynamics in 2003-07 (in percent)

	Composition of Imports (%)					Share in EU-27 Imports (%)					LS Growth 2003-07 (%)	
Product	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007	EU Imports	EU share
Agriculture, Food & Feeds	15.0	13.5	11.0	10.1	10.7	0.143	0.153	0.148	0.160	0.160	13.6	2.7
Industrial Raw Materials	18.7	22.1	21.6	21.6	17.4	0.468	0.533	0.575	0.492	0.376	21.6	-5.2
Fuels	4.3	0.7	2.7	1.8	1.4	0.023	0.004	0.013	0.009	0.008	11.0	-12.1
Machinery, excl. automobiles	10.9	13.3	21.3	18.7	19.4	0.033	0.044	0.082	0.081	0.088	38.4	26.0
Auto and Parts	0.8	1.8	2.0	2.1	1.9	0.015	0.037	0.049	0.059	0.051	42.4	29.0
Iron and Steel	2.8	3.1	3.3	6.2	5.4	0.187	0.163	0.192	0.335	0.221	43.4	10.6
Other Consumer Goods	47.6	45.6	38.1	39.4	43.9	0.119	0.131	0.120	0.132	0.155	20.2	5.3
All Goods	100	100	100	100	100	0.088	0.096	0.105	0.112	0.116	23.3	7.0

Source: Derived from trade reported by the EU to the UN COMTRADE database.

Another evidence of the change towards more processed goods is the change in the composition of BH's export specialization index (ESI[6]) in EU markets. Although ESI with values exceeding

[6] The ESI is a modified version of well-known revealed comparative advantage (RCA) originally introduced by Bela Balassa (1965). While the RCA is the ratio of the share of a given product in BH's total exports to the share of that same product in world imports, the ESI is the same ratio but not to the share in world imports but in a selected market, e.g. the EU's total external imports. An ESI with a value that exceeds unity suggests a strong specialization in the product. An ESI value exceeding unity implies that BH is more specialized in exporting the product to, for instance, the EU than an average trading partner of the EU.

unity tend to be concentrated in products characterized by the low level of processing (e.g., wood, iron ore, raw hides and fur skins, flour, footwear, leather and leather products, non-ferrous metals scrap, honey and sugar), two developments point toward restructuring of export-oriented industries. First, the export offer of products with ESI above unity in EU markets increased over 2002-07 from 47 three-digit SITC products to 71 product groups.[7] This indicates a wider export offer and its larger diversification.

Second, the most visible change, however, relates to higher value added manufactures which have gained comparative advantage in EU markets. These new 'competitive' entrants include among others such product groups as metal working machinery (SITC 737), trailers and other vehicles (786), textile and leather machinery (724), and internal combustion piston engines (713). Processed foods—cereals meals and flours (047) and edible products and preparations (098)—have also acquired specialization in EU markets.

3. FDI and export performance: Implications of the dominance of joint ventures

Like experiences in other Central European transition economies, BH has witnessed restructuring in factor intensities during the second phase of export expansion. While BH relied heavily on exports of natural resource-based and unskilled labor-intensive products during the post-war reconstruction phase, strongly reminiscent of exports of Central European radical reformers during the initial stages of transition following the collapse of central planning, capital and skilled labor intensive products drove the export growth during the second expansion phase (Kaminski 2007). Unskilled labor intensive products together with natural resource-intensive were the main levers of exports growth during the reconstruction phase: their combined share increased from 73 percent in 1996 to 79 percent in 2000 (Table 9), with the growth of the share of unskilled labor accounting for 60 percent of the increase. Transformation towards higher value added products has occurred mainly in exports to the EU-27: composition of EU- and ROW-oriented exports diverges widely emphasizing the importance of EU markets to welfare of BiH.

[7] In SEE-6 markets, the number of products with ESI above unity increased from 36 to 50 over the same period.

Table 9: Exports of BiH and other SEE-5 economies in terms of factors' intensity in 1996, 2000, and 2007 (in percent)

	Share of Total Factor Intensity (%)									Unskilled Labor 2000	Capital and Skilled Labor in 2007	
	Natural Resources			Unskilled Labor			Capital and Skilled Labor					
	1996	2000	2007	1996	2000	2007	1996	2000	2007	1996=100	1996=100	2000=100
Albania	40.1	27.9	39.0	51.6	59.3	48.2	8.4	12.8	12.8	115	153	100
BiH	50.0	56.4	41.3	22.5	25.5	19.8	27.5	18.0	38.9	113	141	216
Croatia	33.0	30.9	39.8	31.1	30.0	16.5	35.9	39.1	43.7	96	122	112
Macedonia, FYR	43.9	30.6	43.6	33.5	32.5	24.9	22.6	36.9	31.5	97	139	85
Serbia & Montenegro	37.0	46.8	39.0	11.5	17.2	12.2	51.5	36.0	48.8	149	95	136
SEE-5	37.1	37.3	40.3	27.2	28.4	18.1	35.6	34.3	41.7	104	117	121

Notes: The classification of factor intensity categories is based on SITC 4-digit products in revision 1. Indexes calculated for shares of skilled labor and capital intensive products in total exports
Source: Computations based on world data from UN COMTRADE database.

During the current expansion phase, the relative position of natural resource-intensive product has declined indicating shift in a causal chain linking factor endowments, comparative advantage and trade patterns. The post-war recovery phase was characterized by a growing gap between a country's large pool of skilled labor force and labor intensive products being the major driver of export expansion. Skills of workers employed in metalworking and mechanical and automotive engineering "… considered to be among the highest skilled workforce in the FSR of Yugoslavia" (FIPA 2003, p. 11 and 12) remained untapped until the 2000s. The share of unskilled labor intensive products increased in total exports between 1996 and 2000. It fell significantly in 2000-07. So did the share of natural resource intensive products falling by 15 percentage points in this period. In contrast, BiH experienced the largest increase among SEE-economies in the share of capital and skilled labor intensive exports in 2000-07.

FDI has been critical to closing the gap between endowments in skilled labor and the dominance of unskilled labor intensive exports in Central European transition economies. Foreign firms have brought capital, marketing and technological knowhow; have employed local skilled labor; and have taken advantage of unlimited access to EU single market. Put differently, BiH is well endowed in skilled labor force but not in capital: in other transition economies that experienced similar transformation in factor intensities, capital came from abroad. Since BiH has had both skilled labor and preferential access to EU markets, an interesting question is whether the same has happened in BiH.

A. FDI and change in BiH export basket

There is considerable evidence pointing to FDI as drivers of the current expansion in exports. Their impact on export was larger than relatively low FDI inflows might suggest, as foreign firms have

focused on export oriented activities. According to a recent study (Silajdzic 2007), an average share of exports in total sales of firms with foreign participation was 64 percent as compared with an average of 33 percent for locally-owned firms. This is in line with the findings for other transition economies also pointing to higher propensity to exports of foreign owned firms (see Kaminski and Smarzynska 2001).

Due to the war and institutional and policy dysfunctional nature of the BiH economic regime in its aftermath, FDI inflows were extremely low until around 2001-02 and subsequently increased although not as strongly as to Serbia and Montenegro. As of 2003, BiH had the smallest stock of FDI per capital among SEE-economies. It stood at 53 percent of the FDI stock per capita in Albania; 28 percent of the level in Macedonia; and it was the same as that of Serbia and Montenegro. By 2007, it stood at 223 percent of the FDI per capita in Albania; 102 percent of the level in Macedonia; and it was at 80 percent of that in combined Serbia and Montenegro.

BiH has been very successful in attracting FDI in 2003-07. In terms of GDP, BiH with 7.4 percent scored well above Albania and Macedonia (Table 10). It has also registered on average stronger growth than Romania (6.7 percent per year) but well below the levels of FDI inflows into Bulgaria and Montenegro. The latter following independence attracted huge FDI inflows exceeding 20 percent in both 2006 and 2007. In terms of FDI stock per capita, BiH has caught up with Macedonia. But except for Croatia with FDI stock per capita significantly higher than in all other countries including the 2007 new EU members, other SEE countries are well below the levels of FDI stock in Bulgaria and Romania. The value of total FDI stock in BiH amounted by the end of 2007 to around US$6 billion or US$1,576 per capita. Despite an impressive surge in 2007, this is still less than around one third of FDI stock per capita in Bulgaria; one fifth in Romania; and around seventh of the level in neighboring Croatia (Table 10).

Table 10: FDI inflows to SEE-economies and Bulgaria and Romania in terms of percent of GDP and values of FDI stock per capita (in US dollars)

						Average	FDI, stock per capita in US$		
	2003	2004	2005	2006	2007	2003-07	2003	2006	2007
Albania	3.1	4.6	3.1	3.6	4.4	3.8	352	433	708
BiH	4.6	7.1	5.6	5.9	13.9	7.4	193	1,044	1,576
Croatia	6.9	3.0	4.6	8.0	9.6	6.4	2,057	6,219	10,143
Macedonia, FYR	2.1	2.9	1.7	5.5	4.2	3.3	687	1,382	1,542
Montenegro	..	..	..	22.9	25.2	24.1	352(a)	1,433(a)	1,960 (a)
Serbia	6.7	3.9	6.1	14.7	7.8	7.9	...	...	...
Bulgaria	10.5	10.8	15.9	23.7	22.7	16.7	652	3,090	4,933
Romania	3.1	8.6	6.6	9.3	5.7	6.7	441	5,903	7,912

Note: (a) no information available separately for Montenegro and Bosnia. The total is for both countries.
Source: own calculations from data in the UNCTAD FDI database.

Over 2004-2007, the largest chunk of FDI flows went to the financial sector (41 percent) followed by telecommunications (26 percent in 2007 alone due the privatization of Telekom Srpske). Manufacturing took 18 percent of the total FDI inflows during this period. In terms of FDI stock, however, the share of industries producing tradable goods in total FDI stock appears to be larger amounting to almost 35 percent, which appears to be close to the average for transition economies. Metal industries (6.3 percent) followed by foods (6.2 percent) have been the major recipient of FDI. Unfortunately, no breakdown for "other industries" is available in FDI data obtained from the BiH Central Bank (Table 11).

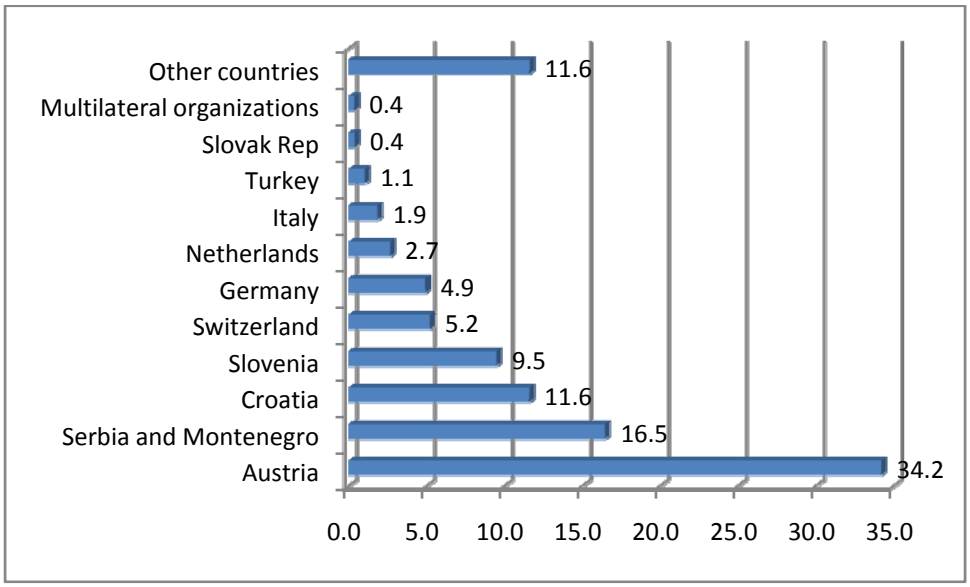
The origins of FDI are important for one reason: those inflows originating in highly developed countries and/or carried out by large MNCs are more likely to bring superior technology, organization and marketing skills. On this count, the picture is mixed as there is a conspicuous absence of large MNCs and a big chunk of FDI came from two neighboring countries—Serbia and Croatia. They accounted in 2008 for almost 30 percent of total FDI stock. Their large presence may point to the significance of direct informal links influencing investment decisions. On the other hand, however, the EU accounted for almost 50 percent of the FDI stock. Austria with 34 percent and Slovenia with 10 accounted for almost 90 percent of the EU total investments in BiH. Around 12 percent come from countries that have not been identified in statistics published by Central Bank of BiH (Figure 2).

Table 11: FDI stock in 2007 by sectors of the national economy (in percent)

Industries	**34.5**	**Services**	**65.5**
Foods & beverages	6.2	Construction	0.7
Chemical products	1.6	Sale, maintenance and repair of motor vehicles and motorcycles/retail sale of automotive fuel	1.4
Other non-metallic mineral products	3.3	Wholesale trade and commission trade, except of motor vehicles and motorcycles	6.7
Manufacture of basic metals	5.3	Telecommunications	16.4
Manufacture of fabricated metal products, except machinery and equipment	1.0	Financial intermediation, except insurance and pension funding	38.1
Motor vehicles, trailers and semi-trailers	1.6	Insurance and pension funding, except compulsory social security	1.0
Other industries	15.5	Real estate activities	1.3

Source: Base on the data provided by the Central Bank of Bosnia and Herzegovina.

Figure 2: Share in FDI stock in 2007 by a country of origin (in percent)



Source: Central Bank of Bosnia and Herzegovina

One way of assessing the impact of FDI on exports is to examine change in factor intensities embodied in the export basket. As argued earlier, the shift towards C&SL (capital- and skilled labor-intensive) products is unlikely to happen without FDI. In spite of the fact that FDI clustered around 2006-07, BiH experienced the largest increase in these exports among SEE-economies with their growth exceeding the growth of total exports by a factor of two in 2000-07. The share increased 21 percentage points as compared to Serbia and Montenegro of 13 percentage points and Croatia with 5 percentage points: Albania's share did not change and Macedonia's contracted by 5 percentage points (Table 12). The caveat is that the share of C&SL intensive products was well below its trend in base year 2000 (see Table 11 above): in 1996-2007 the growth in the share of 41 percent puts BiH below Albania (51 percent) and slightly above Macedonia (39 percent). Furthermore, BiH exports of C&SL products on per capita basis are significantly lower than of other SEE countries except for Albania (Table 12).

Table 12: Exports of capital- and skilled labor-intensive products and FDI stock in 2006

Country	Exports of Capital & Skilled Labor per capita in 2007 (US$)	Ratio of FDI stock to Capital and Skilled Labor Exports in 2007	Share of Capital and Skilled Labor Exports in 2007	Change in Share of Capital & Skilled Labor in Total Exp 2000/07
Albania	42	16.9	12.8	0
BiH	395	4.0	38.9	21
Croatia	1,017	10.0	43.7	5
Macedonia, FYR	559	2.8	31.5	-5
Serbia & Montenegro	476	4.1	48.8	13

Sources: UN COMTRADE Statistics, World Bank WDI database and UNCTAD WIR database.

The surge in the weight of C&SL-intensive products indicates the growth in exports of machinery as well as participation of domestic firms in global division of labor based on production fragmentation or global sharing. The latter, also referred to as producer-driven networks, are dominant in electronic and automotive sectors. Domestic firms become then parts of producer-driven networks characterized by common ownership of vertically-integrated stages of production managed by large MNCs. This is one of the critical links between changes in factor intensities and FDI. Having had examined developments in producer-driven network trade over 1996-2005, the authors of the World Bank study concluded that only "… BiH witnessed a jump … in its network trade share…" and other SEE economies "… are underperformers…" (Kathuria 2008, p. 42). This should by no means suggest that BiH has been a 'super-performer,' as there are doubts as to its sustainability (Kathuria 2008, p. 44).

Indeed, there is a reason to believe that BiH firms are not firmly entrenched into MNC-driven production and distribution networks. We can use the ratio of the FDI stock to the value of C&SL intensive exports as a proxy of the extent of foreign ownership in manufacturing. In the absence of consistent data on the distribution of FDI stocks in SEE-economies, this is a very approximate measure. A high value of this ratio may suggest that firms exporting C&SL intensive products are foreign owned and operate in global MNC-driven production networks. Low values of this ratio may point to much larger presence of local capital and limited ownership by foreign MNCs. BiH ratio of 4.0, although on a par with that for Serbia and Montenegro and higher than in Macedonia, is relatively low indicating relatively strong local ownership.

B. Mode of entry: implications of dominance of joint ventures

Low ratio of FDI stock to C&SL exports combined with evidence from interviews points to joint ventures rather than subsidiaries as the dominant mode of entry of FDI into BiH. BiH firms have been successful in marketing their machinery products in world markets.[8] So have they been in integrating into global automotive networks of production and distribution. The level of integration is similar to that of Central European automotive powerhouses—Czech Republic and Slovakia. Parts import intensity, defined as percent of parts imports in total network exports, rather dramatically declined from 384 in 2002 to 78 percent in 2006 (Table 13). This suggests a very significant increase in domestic processing and assembly operations of automotive products. For comparative purposes, note that parts import

[8] The share of machinery in EU imports from BiH increased from 11 percent in 2003 to 19 percent in 2007 (as reported by the EU to the UN COMTRADE database).

intensity of Slovak automotive network was 76 percent in 2002 and that for Czech Republic amounted to 53 percent in 2002 down from 97 and 89, respectively, in 1995 (Kaminski and Ng 2005).

The data tabulated below do not capture fully BiH firms' involvement in global automotive networks for one reason. There are several tiers in their supply chains. According to Hill (1989, p. 466), the average Japanese automaker's production system constitutes of 170 first-tier, 4,700 second-tier and 31,600 third-tier subcontractors. Historically, BiH firms specialized in intermediate goods supplying, for instance, up to 30 percent of components used in VW's assembly line in Sarajevo as well grade steel and other metals together with engineering components used in cars are produced in Serbia (MIGA 2006). Their products would fall into second- or third-tier of subcontracting: without a detailed examination of their end-use, it would be impossible to identify them in Standard International Trade Classification. Table 13 summarizes calculations presented in Annex Table 2 including only those products whose exports exceeded US$ 1 million in any single year over 2002-07.

Table 13: Developments in trade in automotive networks of production and distribution in 2002-06 (in million of US dollars and percent)

	Export Value ($ millions)						LS Growth (%)
Product	2002	2003	2004	2005	2006	2007	2002-07
Auto network parts exports	17	70	127	192	211	205	46.1
Of which:							
Parts nes int-c engines (SITC 7139)	5	59	103	155	164	157	58.9
Motor vehicle parts/access (SITC 784)	6	8	17	32	41	37	41.7
Auto network final products exports	2	3	13	7	8	18	36.1
Total Auto network exports	20	73	140	199	220	223	45.2
Share of auto network in total exports (%)	1.7	5.8	7.0	7.6	6.7	5.8	
Auto network import intensity (%)	52	51	59	74	65	78	

Sources: Based on partners' data from UN COMTRADE Statistics.

Thus, the combination of joint ventures, as the mode of entry, and BiH's historical specialization, disrupted by the war, in machine building and automotive products explains a "jump" in BiH's network trade share, but both the mode of entry of foreign firms and narrow specialization base raises some concerns as to sustainability of these exports. Joint venture is a preferred mode of entry for firms when there is a need for a local partner because of 'murky' business climate and a firm's competitive advantage does not derive from intangible factors. The latter largely exclude high-technology firms with low capital cost of entry. Put differently, marketing driven firms (e.g., Coca Cola) tend to opt for a joint venture as a mode of entry whereas high-technology firms establish commercial presence only insofar as they fully retain property rights, i.e., they enter through establishing subsidiaries.

The case of two largest exporters of automotive products—Volkswagen and PSC TMD—amply illustrate these concerns. They export, among others, parts of internal combustion piston engines accounting for around three-fourths of total automotive network exports. Both firms need "local involvement" to operate in BiH. Volkswagen re-established its presence in BiH in 1998 as a joint venture with Prevent Sarajevo. Another major exporter, PSC TMD, is fully owned by the Cimos Group with headquarters in Slovenia. The danger is that VW may be reluctant to transfer technology to its BiH joint venture, whereas Cimos may not have attractive technologies to transfer. Both cases corroborate weaknesses in BiH business climate: VW Sarajevo is a joint venture, whereas the Cismos factory in BiH is owned by "former Yugoslavs," either Slovenes or Bosnians, or both. Whatever the case, "foreign owners" have an intimate knowledge of local conditions and do not need local insiders to navigate in BiH's murky business environment. But they also do not have direct access to technological knowhow that leading producers in the world have.

Changes in various characteristics of BiH export basket point to limited transfer of technology embodied in investments in BiH, although no firm conclusion can be derived from this analysis. A closer examination of BiH export baskets suggests that neither technological content nor labor skills embodied in exported goods have changed significantly during the current export expansion phase corroborating the need to attract high quality FDI capable of technology transfer to sustain export performance. These tentative conclusions can be drawn from a more detailed examination of BiH exports in terms of technology and demand for labor according to different skills' levels. In order to analyze the latter, we apply different taxonomies addressing various features of activities involved in production.[9] As will be shown below, the conclusions drawn from BiH foreign trade statistics may not be worth more than their quality.

The results of applying the taxonomy, developed by Landesman and Stehrer (2003), point in the same direction, i.e., towards the absence of a significant shift towards high-tech intensive-activities.

[9] The goodness of results obtained hinges critically on the quality of a classification used to examine export baskets over time by factor and technology mix. The choice is always controversial. There are woeful difficulties to define and measure factor intensity, level of technology involved and trade theorists have long wrestled with it. Some definitions of the groups of goods by factor intensity are overlapping and non-exhaustive. Definitions used here do not suffer from these shortcomings--all industries are taken into account and an industry appears only in one classification; and the classification distinguishes among four types of factors. Since some industries are intensive in terms of more than one factor, the results may be distorted. But even assuming that the initial classification captures adequately factor proportions at a given point of time, with the passage of time it may provide a distorted picture. Some industries may become more capital-intensive or less active in technological and other terms.

Landesman and Stehrer (2003) divide two-digit SITC product groups into three broad categories: (1) ***low technology and labor intensive*** activities including among others agricultural products, textiles and clothing, footwear, some chemicals, tires; (2) ***resource intensive*** activities including, among others, manmade fibers, wood and wood products, coke, refined petroleum products and nuclear fuels, mineral products, and chemicals; and (3) ***medium- to high-technology*** production activities which include, among others, machinery and equipment, transport equipment, and electrical and optical equipment, pharmaceuticals, etc. Exports of resource-intensive products posted the largest increase over 2003-07, whereas exports of low-tech, labor-intensive products recorded the slowest growth. Their share in total declined 7 percentage points, while the share of resource intensive exports increased 7 percentage points in 2007 over 2003 (Table 14).

Table 14: Technology content of BiH foreign trade in 2003 and 2007 (in percent)

	Share in total exports		Index 2007	Share in total imports		Index 2007	Exports in terms of imports	
	2003	2007	2003=100	2003	2007	2003=100	2003	2007
Low-tech, labor intensive	31	24	77	29%	24%	85	23%	33%
Resource intensive	46	53	116	38%	46%	119	40%	53%
Medium to High-tech	23	22	97	33%	30%	91	28%	36%

Source: Own calculations based on BiH's trading partners reporting to UN COMTRADE database.

Interestingly, the composition of imports has moved in the same direction indicating slower growth in import demand for medium- to high- tech products and low-tech labor intensive products. The latter appears to be the result of domestic production substituting imports, as the export coverage of imports of low tech products has posted the largest increase despite the contraction in their share in total exports. Yet, the export coverage of low-tech imports has remained lower than those of other product groups The share of resource intensive products reached almost half of total imports while their export coverage also significantly increased by around one-third to 53 percent in 2007.

The contraction in the share of medium- to high-tech products in total imports, albeit a very small one, raises some concerns about future competitiveness of BiH exports. The share of these products in total imports fell from 33 percent in 2003 to 30 percent in 2007. These products include among others capital equipment goods, whose share in total BiH imports also fell from 18 percent in 2003 to 17 percent in 2007. Note that a 17 percent share is rather low: in Bulgaria's imports, for instance, the share of machinery was on average 20 percent in 2001-03.

The change in terms of trade in favor of resource intensive products and the shift away from EU markets might have exaggerated the role of resource-intensive products in BiH exports. Prices of raw materials and resource intensive products like, for instance, steel, bauxite and aluminum, have increased vis-à-vis many manufactures. In consequence, their volumes might have increased less than their exports in value terms. Furthermore, the rise in price of raw materials exported mainly to SEE-5 countries may be a major factor explaining the fall in the share of the EU-27 in total exports from 76 percent in 2003 to 63 percent in 2006 and 59 percent in 2007.[10]

Indeed, there are two different pictures of the development in technology and labor content of EU-oriented and ROW-oriented exports. Since the EU foreign trade statistics rank among the best in the world, and the EU takes more than half of BiH total exports, the conclusions drawn on their base may reflect closer the actual reality of BiH sources of improved competitiveness. Running the EU data through Landesman's and Stehrer's filter yields a completely different result. The share of BiH exports characterized by low-technology, labor intensive production processes significantly fell in 2003-07, whereas the share of medium- to high-tech products increased almost 20 percent. EU-oriented exports of these products posted the strongest growth with their value of almost three-times higher in 2007 than in 2003. In marked contrast, the dominance of resource intensive products in ROW-oriented exports significantly expanded from 55 percent of the total ROW-destined exports in 2003 to 68 percent in 2007. The share of both low-tech, unskilled labor intensive and medium to high-tech intensive products in ROW-destined exports dramatically contracted in this period; the latter posted a larger reduction than the former (Table 15).

Table 15: Technology content of EU and ROW imports from BiH in 2003 and 2007 (in percent and millions of US dollars)

	EU-27		Index 2007	ROW		Index 2007	Share of EU in total		Index 2007
	2003	2007	2003=100	2003	2007	2003=100	2003	2007	2003=100
Low-tech, labor intensive	33.4	28.9	87	23.0	16.1	70	82.1	72.3	88
Resource intensive	43.0	43.2	100	54.6	68.0	124	71.3	48.0	67
Medium to High-tech	22.7	27.0	119	21.8	14.5	66	76.6	73.0	95
Total	100	100	100	100	100	100	75.9	59.2	78

Source: Own calculations based on EU reporting to UN COMTRADE database.

Exports to the EU not only provide a stimulus to industrial restructuring and moving up the value added but are also critical to creating and retaining highly paid jobs in BiH. While nothing short of

[10] Calculations are based on partners' statistics reported to the UN COMTRADE database, which are not complete for 2007 at the time of this writing.

surveys of exporters could give precise information on wages of those involved in export-oriented industrial activities, some insights can be obtained from an examination of the exports content in terms of labor skills. Higher skills tend to be better rewarded: hence the shift toward products requiring high labor skills would indicate also the shift towards higher paid jobs.[11] In order to shed light on labor skills underlying BiH exports, we use a taxonomy developed by Austrian Institute of Economic Research (Peneder 1999). It classifies two-digit SITC items in terms of embodiments in labor skills. Four levels of skills are distinguished: products requiring ***low-skill*** labor (e.g., most foods and feeds, fabrics, iron and steel, non-ferrous metals, clothing, footwear); ***medium skill blue-collar*** (e.g., energy, vegetable oils and fats, wood products, automobiles, and other vehicles); ***medium skill white-collar*** (e.g., fertilizers, cosmetics, paper articles, power generating equipment, telecommunication and electrical equipment, scientific instruments); and ***high-skill*** labor intensive sectors (e.g., pharmaceuticals, industry special machines, metalworking machinery, industrial equipment, office and data processing machines). Table 16 presents the results of this analysis.

Table 16: Labor content of BiH exports and EU imports from BiH in terms of skill in 2003 and 2007 (in percent)

Level of labor skills	EU-27 2003	EU-27 2007	Index, 2007 2003=100	ROW 2003	ROW 2007	Index, 2007 2003=100	Share of the EU 2003	Share of the EU 2007	Index 2007 2003=100
Low-skill	58.5	53.4	91	48.6	58.2	120	79.1	57.1	72
Medium skill blue-collar	27.1	25.6	94	34.5	25.2	73	71.3	59.5	84
Medium skill white-collar	9.7	8.8	90	11.8	11.9	100	72.1	51.8	72
High-skill	3.8	11.4	300	4.5	3.2	71	72.6	83.7	115

Source: Own calculations based on BiH trading partners' reporting to UN COMTRADE database.

The contrast between two export baskets—EU-27 versus ROW—has become huge five years into the current export expansion phase. While EU-oriented exports in 2003 created more employment opportunities for low-skill labor force, ROW-oriented exports were characterized by the presence of labor with higher skills: the share low-skill labor products in EU-destined exports was 59 percent as compared to 49 percent in ROW-oriented exports (Table 16). By 2007, the change has been rather dramatic: the share of low-skill labor intensive products in ROW exports increased to 58 percent and that in EU-oriented exports fell to 53 percent.

Products using high-skill labor have been the main lever of BiH export growth in 2003-07, although their share in total exports has remained relatively low. The share of high-skill labor in total

[11] Wages in the BiH industrial sector were in 2005 among the highest in the region: only those employed in Croatia earned more. The ratio of wages of skilled to unskilled was 1.4 in 2005 (MIGA 2006).

exports increased from 4 percent in 2003 to 8 percent in 2007 with the shares of other categories of labor slightly contracting. Medium-skilled blue collar jobs appear to have been more affected, as their share overall fell from 29 percent in 2003 to 25 percent in 2007. The high-skill labor intensive sectors have posted the strongest export growth. The value of their EU-oriented exports increased from US$ 35 million in 2003 to US$ 237 million in 2007, with exports of industrial equipment (SITC 74) leading the pack: the value grew from US$ 22 million to US$ 193 million in this period.

Concluding observations

In spite of weaknesses in the investment and business climate, BiH exporters have posted one of the strongest growth rates and the largest increase in the share in world trade among SEE-6 economies during the current export expansion phase. They outperformed in world markets not only suppliers from SEE but also from other countries.

Traditional manufacturing and resource-based industries continue to tower over BiH's export basket and display strong comparative advantage. Yet, there are some signs of the emergence of more sophisticated export-oriented activities pointing to an increased participation of BiH manufacturers in global supply chains. BiH export growth performance during its current expansion phase has been characterized by:

- Strong growth across all sectors of the BiH economy. It was broadly based with all double–digit SITC sectors having had expanded exports of their products, albeit at a different pace.
- Greater use of skilled labor, especially visible in EU imports from BiH, indicating that the gap between factor content of BiH exports and its endowments in skilled labor force, characteristic of post-war recovery phase, appears to have been partly closed.
- Increase in the export coverage of goods in terms of their imports. As a result, BiH has made a huge step towards improved financial sustainability of external performance.
- The growing diversity in export offer. This points to the depth of industrial restructuring and increased level of processing embodied in exports, as indirectly revealed in trading partners' import statistics.
- Strong growth of capital and skilled labor-intensive products associated also with the entry of BiH firms into global production networks (almost exclusively automotive).
- And an increased presence of firms with foreign capital. Like in other transition economies, they tend to display, as a rule, strong export orientation and higher technology content.

The current expansionary phase bears some resemblance to the second wave of export growth of Central Europe, albeit with two caveats. Both have significant implications weakening benefits associated with the presence of foreign firms. The first is that Central European economies at this stage had mostly zeroed customs duties on industrial imports from the EU. In consequence, firms had to

compete on equal footing with exporters from the EU: they did not have duties on imports of machinery and other industrial inputs originating in the EU.

The second caveat concerns the modality of FDI establishing presence in a country. The similarity is in the role played by firms with foreign capital in transformation of the economy, whereas the difference is in the dominance of subsidiaries of major multinational corporations in most Central European transition countries except for Slovenia. While we do not have reliable data, joint ventures appear to be a major mode of entry of foreign firms into BiH. Interviews and examination of the database containing information on major exporters would suggest that this is indeed the case. The drawback of joint ventures is that they are much weaker in transfer of know-how and new technologies. The latter may explain the absence of a visible shift toward activities with higher technology content.

Indeed, it seems that exports of engineering sectors constituting what once was the heart of the Yugoslav auto components industry remain below their potential. The preferences accorded by tariff policy to car assembly continue to distort the development of this sector. Poland followed a similar path in the early 1990s: the price of this policy was a delayed entry into global automotive networks of production and distribution, which happened only under the pressure of tariff liberalization on imports from the EU stipulated by the European Association Agreement. Until the interim trade agreement of the SAA goes into effect, the BiH authorities will not be under a similar pressure. Considering available human capital and BiH industrial tradition, the price tag for these policy-induced distortions may be quite high.

Another important conclusion derived from the empirical analysis of BiH foreign trade performance is the importance of EU markets. Access to EU markets offers BiH producers a unique opportunity to establish internationally competitive operations relying on a higher R&D and know how component and using labor with higher skills. This is critical to the modernization of BiH's industrial base. Understandably, access to CEFTA 2006 markets does not offer similar opportunities as inter-industry trade still remains a dominant mode of trade interaction.

References

EC 2007: *Bosnia and Herzegovina 2007 Progress Report*. Commission Staff Working Document, Commission of the European Communities, Brussels, 6 November.

FIPA 2003: *Auto Components Industry: Bosnia and Herzegovina. Profile Report*, Foreign Investment Promotion Agency of Bosnia and Herzegovina, Sarajevo, December.

Garibaldi, P., N. Mora, R. Sahay and J. Zettelmeyer. 2002. „What Moves Capital to Transition Economies?" *IMF Working Paper, WP/02/64*. Washington, D.C.

Hadziomegaric, A., M. Jakubiak, N. Oruc, and W. Paszynski. 2007. "Regional Free Trade Agreements of Bosnia and Herzegovina: analysis and policy recommendations." *CASE Reports No. 69/2007*, Center for Social and Economic Research, Warsaw.

Hill, J. 1989. "Comparing transnational production systems: The automobile industry in the USA and Japan." *International Journal of Urban and Regional Research* 13(3): 462-480.

Hayden, R.M. 1995. "The 1995 Agreements on Bosnia and Herzegovina and the Dayton Constitution: The Political Utility of a Constitutional Illusion," *East European Constitutional Review*, vol.4, no.4, Fall.

Kaminski, B. 2007. "Outsourcing and Industrial Restructuring. New Europe's Success," in E. Pauss, ed., *Global Capitalism Unbound: Winners and Losers from Offshore Outsourcing*, Palgrave, London.

Kaminski, B., and F. Ng. 2005. "Production Disintegration and Integration of Central Europe into Global Markets," *International Review of Economics and Finance*, 14, 2005.

Kaminski, B. and B. Smarzynska. 2001. "Integration into global production and distribution networks through FDI: The case of Poland." *Communist Economies & Economic Transformation*, Vol. 13. No. 4.

Kaminski B., Z.K. Wang, and L.A. Winters. 1996. "Export performance in transition economies." *Economic Policy*, October.

Karthuria, S. (ed). 2008. *Western Balkans Integration and the EU: An Agenda for Trade and Growth*, The World Bank, Washington D.C.

Kaufmann D., A. Kraay, and M. Mastruzzi. 2007. *Governance Matters VI: Governance Indicators for 1996-2006* at http://info.worldbank.org/governance/wgi2007/

Landesmann, M. and R. Stehrer. 2003. "Structural Patterns of East-West European Integration: Strong and Weak Gershenkron Effects, in WIIW Structural Report 2003 on Central and Eastern Europe, Vol. 1, The Vienna Institute for International Economic Studies, Vienna.

MIGA 2006: *Investment Horizons: Western Balkans. A Study of Foreign Direct Investment Costs and Conditions in Automotive Component Manufacturing and Food/Beverage Processing in Five Countries*. May

MFTER 2007: *A Trade Related Needs Assessment*, A project implemented by Maxwell Stamp, PLC for EUTPP and Ministry of Foreign Trade and Economic Relations, Bosnia and Herzegovina, Sarajevo, November.

Peneder, M. 1999. "Intangible Investment and Human Resources: The New WIFO Taxonomy of Manufacturing Industry." *WIFO Working Paper No. 114*, Austrian Institute of Economic Research, Vienna.

Silajdzic, S. 2007. “Patterns of restructuring and competitiveness of the BiH manufacturing industry and the role of technological capabilities.” Mimeo, accessed on August 9,2008 on the Web at http://english.ecorys.nl/dmdocuments/Silajdzic%20-%20BiH%20manufacturing%20industry.pdf

USAID 2006: *Forest & Wood Sector Review—Bosnia and Herzegovina: A Rapid Survey of Forest Resources, Policy, Legislation, Institutions, and the Wood Processing Industry*. Sarajevo, January.

WB 2005: *Bosnia and Herzegovina: Country Economic Memorandum*. Report No.29500-BA, World Bank, Washington D.C. May.

Annex Table 1: Products in terms of Harmonized System six-digit items identified according to different levels of processing

Logging (logs)	
440110	Fuel wood, in logs, in billets, in
440122	Nonconiferous
440130	Sawdust and wood waste and scrap, w
440200	Wood charcoal (including shell or n
Primary wood processing	
440310	Treated with paint, stains, creosot
440320	Other, coniferous
440391	Of oak (Quercus spp.)
440392	Of beech (Fagus spp.)
440399	Other
440410	Coniferous
440420	Nonconiferous
440690	Other

Secondary wood processing

440710	Coniferous
440724	Virola, Mahogany (Swietenia spp.),
440729	Other
440791	Of oak (Quercus spp.)
440792	Of beech (Fagus spp.)
440799	Other
440810	Coniferous
440831	Dark Red Meranti, Light Red Meranti
440839	Other
440890	Other
440910	Coniferous
440920	Nonconiferous
441029	Other
441039	Other
441090	Other
441111	Not mechanically worked or surface
441119	Other
441121	Not mechanically worked or surface
441129	Other
441131	Not mechanically worked or surface
441139	Other
441191	Not mechanically worked or surface
441199	Other
441213	With at least one outer ply of trop
441214	Other, with at least one outer ply
940130	Swivel seats with variable height a
940140	Seats other than garden seats or ca
940150	Seats of cane, osier, bamboo or sim
940161	Upholstered
940169	Other
940180	Other seats
940190	Parts for all kinds of seats

441219	Other
441223	Other, containing at least one laye
441229	Other
441299	Other
441300	Densified wood, in blocks, plates,
441400	Wooden frames for paintings, photog
441510	Cases, boxes, crates, drums and sim
441520	Pallets, box pallets and other load
441600	Casks, barrels, vats, tubs and othe
441700	Tools, tool bodies, tool handles, b
441810	Windows, Frenchwindows and their fr
441820	Doors and their frames and threshol
441830	Parquet panels
441840	Shuttering for concrete constructio
441850	Shingles and shakes
441890	Other
441900	Tableware and kitchenware, of wood.
442010	Statuettes and other ornaments, of
442090	Other
442110	Clothes hangers
442190	Other
450190	Other
450310	Corks and stoppers
450390	Other
450410	Blocks, plates, sheets and strip; t
450490	Other
940330	Wooden furniture of a kind used in
940340	Wooden furniture of a kind used in
940350	Wooden furniture of a kind used in
940360	Other wooden furniture
940370	Furniture of plastics
940380	Furniture of other materials, inclu
940390	Parts

Other wood based products

480100	Newsprint, in rolls or sheets.
480220	Paper and paperboard of a kind used
480254	Weighing less than 40 g/m²
480255	Weighing 40 g/m² or more but not mo
480256	Weighing 40 g/m² or more but not mo
480257	Other, weighing 40 g/m² or more but
480258	Weighing more than 150 g/m²
480261	In rolls
480262	In sheets with one side not exceedi
480269	Other
480300	Toilet or facial tissue stock, towe
480411	Unbleached
480419	Other
480421	Unbleached
480429	Other
480431	Unbleached
480439	Other
480441	Unbleached
480449	Other
480451	Unbleached
480459	Other
480511	Semichemical fluting paper
480512	Straw fluting paper
480519	Other
480524	Weighing 150 g/m² or less
480525	Weighing more than 150 g/m²
480530	Sulphite wrapping paper
480540	Filter paper and paperboard
480550	Felt paper and paperboard
480591	Weighing 150 g/m² or less
480592	Weighing more than 150 g/m² but les
480593	Weighing 225 g/m² or more
480620	Greaseproof papers
480630	Tracing papers
480640	Glassine and other glazed transpare
480700	Composite paper and paperboard (mad
480810	Corrugated paper and paperboard, wh
480820	Sack kraft paper, creped or crinkle
480830	Other kraft paper, creped or crinkl
480890	Other
480910	Carbon or similar copying papers
480920	Selfcopy paper
480990	Other
481013	In rolls
481014	In sheets with one side not exceeding
481019	Other
481022	Lightweight coated paper
481029	Other
481031	Bleached uniformly throughout the m
481032	Bleached uniformly throughout the m
481039	Other

481099	Other
481110	Tarred, bituminised or asphalted pa
481141	Self-adhesive
481149	Other
481190	Other paper, paperboard, cellulose
481200	Filter blocks, slabs and plates, of
481310	In the form of booklets or tubes
481320	In rolls of a width not exceeding 5
481390	Other
481420	Wallpaper and similar wall covering
481490	Other
481610	Carbon or similar copying papers
481620	Selfcopy paper
481690	Other
481710	Envelopes
481720	Letter cards, plain postcards and c
481810	Toilet paper
481820	Handkerchiefs, cleansing or facial
481830	Tablecloths and serviettes
481840	Sanitary towels and tampons, napkin
481850	Articles of apparel and clothing ac
481890	Other
481910	Cartons, boxes and cases, of corrug
481920	Folding cartons, boxes and cases, o
481930	Sacks and bags, having a base of a
481940	Other sacks and bags, including con
481950	Other packing containers, including
481960	Box files, letter trays, storage bo
482010	Registers, account books, note book
482020	Exercise books
482030	Binders (other than book covers), f
482040	Manifold business forms and interle
482050	Albums for samples or for collectio
482090	Other
482110	Printed
482190	Other
482210	Of a kind used for winding textile
482290	Other
482312	Selfadhesive
482319	Other
482320	Filter paper and paperboard
482340	Rolls, sheets and dials, printed fo
482360	Trays, dishes, plates, cups and the
482370	Moulded or pressed articles of pape
482390	Other
490900	Printed or illustrated postcards; p
491000	Calendars of any kind, printed, inc
491110	Trade advertising material, commerc
491191	Pictures, designs and photographs
491199	Other
481092	Multiply

Annex Table 2: Trade in automotive network of production in 2002-07 (in million of US dollars and percent)

SITC-R3	Product	Trade Value ($ million)						LSG (%)
		2002	2003	2004	2005	2006	2007	2002-07
Exports of Auto Parts & Final Products								
7132	Motor veh. i/c pistn engines	1.2	0.0	1.4	0.2	0.4	1.0	16.0
7139	Parts nes int-c engines	5.1	59.1	103.1	155.4	164.5	156.9	58.9
74419	Pts nes of work trucks	0.0	0.0	0.0	0.1	0.2	0.0	53.8
77831	Ignition/starting equipment	2.6	1.7	2.3	1.8	2.3	3.1	4.7
77833	Ignition/starting parts	0.6	1.0	1.5	1.8	1.5	4.1	32.8
7843	Motor veh part/acces nes	5.9	8.1	16.8	31.7	40.8	36.7	41.9
Subtotal	Auto parts network	17.1	70.3	126.9	192.3	211.3	204.9	46.1
7812	Pass motor veh, exc buses	0.9	1.4	8.9	1.6	1.5	4.3	18.0
7821	Goods transport vehicles	0.3	0.1	1.7	2.0	1.3	2.5	47.7
Subtotal	Auto network final products	2.5	2.7	13.0	6.7	8.3	18.0	36.1
Total	Auto network: parts & final gds	19.6	73.0	139.9	199.0	219.6	222.9	45.2
	Share in total exports (%)	1.7	5.8	7.0	7.6	6.7	5.8	
Imports of Auto Parts & Final Products								
6251	Tyres new for motor car	9.5	12.4	16.8	19.0	19.5	25.3	18.2
6252	Tyres,new,bus or lorry	6.1	7.9	10.9	12.4	9.8	12.2	12.2
7132	Motor veh. i/c pistn engines	3.6	0.7	4.0	7.2	7.3	9.4	35.7
7138	Int comb piston engs nes	0.6	1.0	1.5	0.9	0.8	1.1	4.5
7139	Parts nes int-c engines	4.9	5.4	22.1	49.8	32.7	75.0	56.7
77831	Ignition/starting equipment	0.9	0.8	1.7	1.5	1.5	1.4	11.6
77833	Ignition/starting parts	0.3	0.3	0.3	0.9	0.4	0.7	21.0
77834	Veh elect light/etc equ.	1.1	0.7	1.2	1.2	1.5	1.9	13.1
77835	Veh elect light/etc part	0.3	0.3	0.3	0.5	0.5	0.8	21.3
7841	Motor veh chassis+engine	0.2	0.1	0.3	0.1	0.7	0.0	-20.1
7842	Motor vehicle bodies	13.0	1.7	12.7	29.6	30.6	41.4	43.6
7843	Motor veh part/acces nes	27.1	26.8	42.8	54.0	57.0	69.8	20.7
Subtotal	Auto parts network	68.8	59.1	115.7	178.5	163.6	241.0	27.9
7812	Pass motor veh, exc buses	61.2	71.8	104.7	134.9	141.9	226.4	25.3
7821	Goods transport vehicles	29.9	33.2	50.2	71.3	53.0	73.9	17.9
7822	Special-use vehicles nes	2.8	4.1	9.5	7.7	5.7	13.8	25.0
7831	Buses etc	12.8	11.3	12.4	16.1	11.6	15.5	3.7
7832	Semi-trailer tractors	11.1	13.5	20.2	25.4	16.2	43.7	21.8
7441	Goods trucks/tractors/etc	4.7	4.4	5.4	6.5	7.7	9.3	15.2
7851	Motorcycles/mopeds	0.6	1.0	1.2	1.2	1.3	2.6	23.9
Subtotal	Auto network final products	139.7	156.9	229.7	305.8	262.7	421.4	21.0
Total	Auto network: parts & final gds	208.4	216.0	345.4	484.3	426.3	662.4	23.3
	Share in total imports (%)	6.2	6.0	6.8	8.2	6.9	8.5	

Sources: Based on partners' data from UN COMTRADE Statistics.